

MONTHLY WEATHER REVIEW.

(GENERAL WEATHER SERVICE OF THE UNITED STATES.)

WASHINGTON, D. C., APRIL, 1882.

WAR DEPARTMENT,
OFFICE OF THE CHIEF SIGNAL OFFICER,

DIVISION OF TELEGRAMS AND REPORTS FOR THE BENEFIT OF COMMERCE AND AGRICULTURE.

INTRODUCTION.

This REVIEW presents a general summary of the meteorological data collected by the Signal Service during the month of April, 1882.

The weather has been particularly favorable for agricultural pursuits in almost every section of the country, and trustworthy reports indicate that the crops of cereals will be above the average, and in the southern sections of the country, where there is an unusually large acreage of wheat, an early and abundant crop is anticipated.

The April rains on the Pacific coast have placed the crop in that region out of danger, and in the southern sections of California, the pasturage is reported to be excellent.

In the northwestern states, and in sections of Tennessee and Kentucky, the peach, cherry and pear crops were injured by April frosts, while in the eastern sections of the country the fruit crop is well advanced and promises to compare favorably with the average yield.

The severe storms of the month passed over the central part of the United States from Colorado eastward, south of the average course of April storms, and were in almost every case attended by local storms and tornadoes which proved destructive to both life and property.

A new feature of THE WEATHER REVIEW will be found under the head of "Cotton-Region Reports." The Chief Signal Officer has recently begun a system of daily telegraphic reports for the benefit of those interested in this staple, and the accompanying table gives the monthly mean of the maximum and minimum temperatures and the average rainfall for the month in the various cotton districts throughout the south.

A general interpretation of the reports for the month will show that the weather has been favorable; the observer at Chattanooga reports that cotton-planting is proceeding rapidly and that the acreage is 40 per cent. greater than in 1881. It is estimated that 25,000 bales will be produced in Hamilton county, Tennessee.

That part of THE REVIEW referring to International Meteorology presents the general weather conditions which prevailed over the northern hemisphere during the month of February, 1880, and the tracks of barometric minima for May, 1880, traced from simultaneous observations taken at 7.35 a. m., Washington mean time. It will be seen that the cold weather which prevailed over Europe during January, 1880, continued until about the 10th of February, when the extended area of

high barometer in that region disappeared, and was followed by a succession of storms over northern and northwestern Europe, attended by southerly winds and warmer weather.

The magnetic storm which occurred during the auroral display of the 16th is of special interest. Reports show that the display was visible westward from the British Isles to the Pacific coast, and that vessels on the Atlantic apparently changed their course both to the north and south of the true course when the display was most brilliant.

An unusual number of icebergs were encountered by vessels in the North Atlantic during the month, and at the close of April the danger to shipping approaching the coast, was very great. An examination of chart number vii., which exhibits the limits within which ice was observed, suggests the advisability of selecting the southern routes for vessels passing to and from Europe at this season of the year. Under the heading of "Ocean Ice," will be found special reports giving the latitude and longitude in which icebergs were observed.

In the preparation of this REVIEW the following data have been used, viz: the regular tri-daily weather charts, containing the data of simultaneous observations taken at one hundred and thirty-five Signal Service stations and fifteen Canadian stations, as telegraphed to this office; one hundred and ninety monthly journals and one hundred and seventy-three monthly means from the former, and fifteen monthly means from the latter; one hundred and ninety-five monthly registers from voluntary observers; sixty monthly registers from United States Army Post Surgeons; Marine Records; International Simultaneous Observations; Marine Reports through the co-operation of the New York Herald Weather Service; abstracts of Ships' Logs, furnished by the publishers of "The New York Maritime Register"; monthly reports from the local weather services of Kansas, Nebraska and Missouri, and of the Central Pacific railway company; trustworthy newspaper extracts; special reports.

BAROMETRIC PRESSURE.

The mean barometric pressure for the month over the United States and Canada is shown by the isobarometric lines, in black on chart ii. The area of lowest mean pressure extends from southern Arizona, northeastward over northern New Mexico and the greater part of Colorado. While a second area of low pressure is central in the north Atlantic and extends to the westward over the Gulf of Saint Lawrence. The barometer is highest north of Lake Superior and Minnesota. From the chart it will be seen that the area of mean high barometer extends over the central part of the continent. Compared with the previous month, the pressure is from five-